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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,088	10/19/2001	Gary Milo	2590/102	3440

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125 SUMMER STREET
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EXAMINER

LAZARO, DAVID R

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 08/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,088

Applicant(s)

MILO, GARY

Examiner

David Lazaro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

1. This Office Action is in response to the amendment filed 05/05/2005.
2. Claims 1, 10 and 17 were amended.
3. Claims 8 and 16 are canceled.
4. Claims 1-7, 9-15 and 17 are pending in this office action.

Response to Amendment

5. The rejection of Claim 10 under 35 U.S.C. 112, second paragraph, is withdrawn.
6. Applicant's arguments filed 05/05/2005 have been fully considered. A new grounds of rejection is made in view of applicant's amendment and corresponding arguments.
7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-7, 9-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,519,703 by Joyce (Joyce) in view of U.S. Patent 6,657,954 by Bird et al. (Bird).

10. With respect to Claim 1, Joyce teaches an interface between a site and an external network for screening packets on the external network, each packet having an associated source address (Col. 2 lines 30-40 and Col. 4 lines 48-54), the interface comprising: a. an heuristic profiler for ascribing a characteristic value (Col. 2 lines 41-65) to each address on the external network (Col. 4 lines 14-21 and lines 44-60) based at least on prior activity associated with the address (Col. 3 lines 29-67 and Col. 4 lines 44-60); b. a profiler for monitoring a load on the site (Col. 3 lines 29-37, Col. 3 lines 59-67, and Col. 4 lines 34-43) and c. a filter for selectively passing a particular packet from the external network to the site based at least on the characterizing value ascribed by the heuristic profiler to the source address associated with the particular packet (Col. 2 lines 30-40 and Col. 3 lines 29-58) in relation to threshold values (Col. 3 lines 16-38, lines 23 and 24 specifically).

While Joyce teaches a profiler and threshold values, Joyce does not explicitly disclose such a threshold value being set, on the basis of the profiler monitoring a load on the site. Bird teaches also teaches a profiler for monitoring a load on a site (Col. 6 lines 39-59 and Col. 7 lines 1-39). The profiler can set a threshold value on the basis of the monitoring (Col. 6 line 39 - Col. 7 line 39). This allows for adaptive threshold values that are reflective of actual network conditions (Col. 6 lines 39-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the interface disclosed by Joyce and modify as indicated by Bird such that the interface further comprises a profiler for monitoring a load on the site and for setting, on the basis thereof, a threshold value; and a filter for selectively

passing a particular packet from the external network to the site based at least on the characterizing value ascribed by the heuristic profiler to the source address associated with the particular packet in relation to the threshold value set by the profiler. One would be motivated to have this, as there is need for a technique whereby threshold values can be dynamically adjusted to adapt to current network conditions (In Bird: Col. 2 lines 53-60).

11. With respect to Claim 2, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches wherein the heuristic profiler ascribes a characteristic value to each known address on the external network based at least on characteristics of prior packets received by the site bearing the source address associated with the particular packet (Col. 3 lines 29-67 and Col. 4 lines 44-60).

12. With respect to Claim 3, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches the site is a computer (In Joyce: Col. 3 lines 1-15 and Col. 7 lines 6-16).

13. With respect to Claim 4, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches the site is a local network of computers (In Joyce: Col. 3 lines 1-15 and Col. 7 lines 6-16).

14. With respect to Claim 5, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches the site is a web server (In Joyce: Col. 3 lines 1-15 and Col. 7 lines 6-16).

15. With respect to Claim 6, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches further comprising a firewall in communication with the site, the

firewall interposed between the site and the network (In Joyce: Col. 2 lines 16-40 and Col. 3 lines 1-15).

16. With respect to Claim 7, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches a load monitor for monitoring the traffic of packets between the network and the site relative to a specified nominal load (In Joyce: Col. 3 lines 29-67 and Col. 4 lines 34-60).

17. With respect to Claim 8, Joyce in view of Bird teaches all the limitations of Claim 7 and further teaches filter selectively passes a particular packet based at least on the monitored traffic of packets (In Joyce: Col. 3 lines 29-67 and Col. 4 lines 34-60).

18. With respect to Claim 9, Joyce in view of Bird teaches all the limitations of Claim 1 and further teaches a history module for developing a time profile of observations of packets received from associated source addresses (In Joyce: Col. 3 lines 29-67 and Col. 4 lines 34-60).

19. With respect to Claim 10, Joyce teaches a method for screening a flow of packets between a site and an external network each packet having an associated source address (Col. 2 lines 30-40 and Col. 4 lines 48-54), the interface comprising: a. ascribing a hierarchical value (Col. 2 lines 41-65) to a subset of addresses on the external network (Col. 4 lines 14-21 and lines 44-60) based at least on prior activity associated with each address of the subset (Col. 3 lines 29-67 and Col. 4 lines 44-60); b. monitoring a load on the site (Col. 3 lines 29-37, Col. 3 lines 59-67, and Col. 4 lines 34-43); c. setting threshold values (Col. 3 lines 16-38, lines 23 and 24 specifically); and d. selectively passing packets from the external network to the site based at least on

any hierarchical value ascribed to the source address associated with each packet (Col. 2 lines 30-40 and Col. 3 lines 29-58) in relation to the threshold values (Col. 3 lines 16-38, lines 23 and 24 specifically).

While Joyce teaches monitoring and threshold values, Joyce does not explicitly disclose such a threshold value being set on the basis of the load. Bird teaches also teaches monitoring a load on a site (Col. 6 lines 39-59 and Col. 7 lines 1-39). A profiler can set a threshold value on the basis of the monitored load (Col. 6 line 39 - Col. 7 line 39). This allows for adaptive threshold values that are reflective of actual network conditions (Col. 6 lines 39-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the method disclosed by Joyce and modify as indicated by Bird such that the method further comprises setting a threshold value on the basis of the load; and selectively passing packets from the external network to the site based at least on any hierarchical value ascribed to the source address associated with each packet in relation to the threshold value. One would be motivated to have this, as there is need for a technique whereby threshold values can be dynamically adjusted to adapt to current network conditions (In Bird: Col. 2 lines 53-60).

20. With respect to Claim 11, Joyce in view of Bird teaches all the limitations of Claim 10 and further teaches checking each packet for compliance with specified protocol standards (In Joyce: Col. 3 lines 29-67 and Col. 4 lines 34-43).

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21. With respect to Claim 12, Joyce in view of Bird teaches all the limitations of Claim 10 and further teaches developing a time profile of observations of packets received from associated source addresses (In Joyce: Col. 3 lines 29-67 and Col. 4 lines 34-60).

22. With respect to Claim 13, Joyce in view of Bird teaches all the limitations of Claim 10 and further teaches the step of monitoring the traffic of packets between the network and the site relative to a specified nominal load (In Joyce: Col. 3 lines 29-67 and Col. 4 lines 34-60).

23. With respect to Claim 14, Joyce in view of Bird teaches all the limitations of Claim 13 and further teaches the step of setting a threshold standard based on the monitored traffic of packets between the network and the site (In Joyce: Col. 3 lines 16-67 with particular note of lines 20-25 and lines 61-67, and Col. 4 lines 34-60).

24. With respect to Claim 15, Joyce in view of Bird teaches all the limitations of Claim 14 and further teaches wherein the step of selectively passing packets from the external network to the site is based, at least in part, on the hierarchical value ascribed to the source address associated with each packet relative to the threshold standard (In Joyce: Col. 3 lines 16-67).

25. With respect to Claim 17, Joyce teaches a computer program product for use on a computer system for screening data flow between an external network device and a local site (Col. 2 lines 30-40 and Col. 4 lines 48-54), the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable program code comprising: a. program code for ascribing a hierarchical value (Col. 2 lines 41-65) to a subset of addresses on the

external network (Col. 4 lines 14-21 and lines 44-60) based at least on prior activity associated with each address of the subset (Col. 3 lines 29-67 and Col. 4 lines 44-60); b. program code for monitoring a load on the local site (Col. 3 lines 29-37, Col. 3 lines 59-67, and Col. 4 lines 34-43); and c. program code for selectively passing packets from the external network to the local site based at least on the hierarchical value ascribed to the source address associated with each packet (Col. 2 lines 30-40 and Col. 3 lines 29-58) in relation to threshold values (Col. 3 lines 16-38, lines 23 and 24 specifically).

While Joyce teaches monitoring and threshold values, Joyce does not explicitly disclose such a threshold value being set on the basis of the monitoring of the load on the local site. Bird teaches also teaches monitoring a load on a site (Col. 6 lines 39-59 and Col. 7 lines 1-39). A profiler can set a threshold value on the basis of the monitored load (Col. 6 line 39 - Col. 7 line 39). This allows for adaptive threshold values that are reflective of actual network conditions (Col. 6 lines 39-59).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to take the computer readable program code disclosed by Joyce and modify as indicated by Bird such that the computer readable program code further comprises program code for monitoring a load on the local site and for setting, on the basis thereof, a threshold value; and program code for selectively passing packets from the external network to the local site based at least on the hierarchical value ascribed to the source address associated with each packet in relation to the threshold value. One would be motivated to have this, as there is need for a technique whereby threshold

values can be dynamically adjusted to adapt to current network conditions (In Bird: Col. 2 lines 53-60).

Response to Arguments

26. Applicant's arguments filed 05/05/2005 have been considered but are moot in view of the new ground(s) of rejection. Particularly, Applicant's argued that limitations, with regards to a threshold value set on the basis of a monitored load, were not taught by the Joyce reference. A new grounds of rejection has been made however, showing that such limitations are obvious in view of the Bird reference.

Conclusion

27. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

28. U.S. Patent 5,936,939 by Des Jardins et al. "Digital network including early packet discard mechanism with adjustable threshold" August 10, 1999. Discloses an adaptive discard policy based on a degree of congestion over a selected period of time.

29. U.S. Patent 6,836,800 by Sweet et al. "Managing computer resources" December 28, 2004. Discloses the determination of threshold values based on historical/temporal traffic conditions.

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lazaro whose telephone number is 571-272-3986. The examiner can normally be reached on 8:30-5:00 M-F.

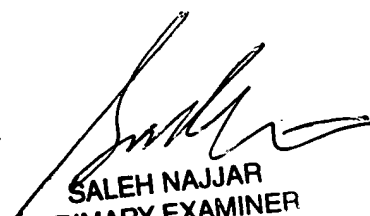
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Lazaro
July 26, 2005



SALEH NAJJAR
PRIMARY EXAMINER